

plumbaginous spots or streaks, the small yellow spot replaced by a pale brown one; interno-basal area pale silky brown; secondaries orange, with a broad irregular costal and external brown border: thorax brown; abdomen ochreous, narrowly transversely barred with black.

Expanse of wings 2 inches 2 lines.

Java (*Horsfield*). Type, B.M.

At once distinguished from its allies by the plumbaginous markings and yellow dot on primaries, and the subcostal brown spot of secondaries.

### Family Cocytiidæ.

(*Cocytides*, Boisd.)

Genus COCYTIA, Boisd.

#### 1. *Cocytia chlorosoma*, n. sp.

♂. Nearly allied to *C. Durvillei* ♂, but smaller, shorter in the wing, with the palpi slightly shorter, antennæ and legs more slender, the black margins of the wings considerably narrower, the internervular folds much less strongly blackened, the orange spot at base of primaries about one fourth the size; a small yellow tuft above the anus.

Expanse of wings 3 inches 1 line.

Aru (*Wallace*). Type, B.M.

I have no doubt that this is a distinct species.

### EXPLANATION OF PLATE XIII.

Fig. 1. *Eusemia communis* (spotted ochre-tinted form), p. 140. n. 6.

Fig. 2. — *villicoides*, p. 141. n. 7.

Fig. 3. — *superba*, p. 141. n. 8.

Fig. 4. — *pulchra*, p. 143. n. 12.

XIX.—*Descriptions of new Species of Gobiidæ in the Collection of the British Museum.* By A. W. E. O'SHAUGHNESSY, Assistant in the Natural-History Departments.

*Gobius Burtoni*, sp. n.

D.  $6\frac{1}{10}$ . A.  $\frac{1}{5}$ . L. lat. 38.

The height of the body is one seventh of the total length; the length of the head is comprised four times and a half in the same. Head flattened, broader than high; snout slightly

longer than the diameter of the eye, which is rather more than one fifth of the length of the head. Head naked; small scales on nape. No canines, but the outer series of the teeth enlarged. Upper pectoral rays not silk-like. Ventral rather narrow and tubular, not reaching quite to the vent; pectorals reaching slightly beyond the ventrals, to the vent. Reddish brown, becoming paler on the lower parts of the body; head covered with small black spots and dots; a longitudinal lateral dark brown band from within the axil of the pectoral to the caudal.

One specimen, in the collection of the British Museum, from Fernando Po, was collected by Capt. Burton, after whom it is named. Length  $3\frac{1}{2}$  inches.

*Gobius castaneus*, sp. n.

D.  $7\frac{1}{10}$ . A.  $\frac{1}{10}$ . L. lat. 70-72.

The height of the body is one sixth, the length of the head one fourth, of the total length. Head as broad as high, naked, as well as the nape in one specimen, in the other a few scales in front of the dorsal. Scales small. Interorbital space a little less than the diameter of the eye, which is one fifth of the length of the head. Snout as long as the eye; cleft of the mouth oblique, with the lower jaw prominent. Teeth small; canines none. The first dorsal is not so high as the body; the second is higher than the first, and nearly as high as the body. Caudal rounded. Light brown, deeper on the back; anal and ventral dark-coloured or darker towards their extremities; dorsal fins each with three or four longitudinal rows of dark brown dots; caudal similarly dotted.

Two small specimens in the collection of the British Museum represent this species; they are from Nagasaki.

*Euctenogobius strigatus*, sp. n.

D.  $6\frac{1}{10}$ . A.  $\frac{1}{10}$ . L. lat. 58.

The height of the body is one seventh of the total length; the length of the head is contained four times and a half in the same. The eyes are almost close together, equal to the length of the snout in diameter, and not quite one third of the length of the head. Head naked, nape scaly; the length of the head is double its breadth and height, which are equal. Fourteen longitudinal series of scales between the dorsal and anal fins. Ventral distant from vent by about half its length. First dorsal lower than the second. Reddish brown, with numerous darker narrow vertical streaks on each side of the body from

head to caudal, two dark streaks from eye to mouth; fins variegated with brown, as in *Gobius banana*; a brown mark on upper part of base of pectoral.

One specimen in the British-Museum collection, from Surinam, 3 inches long.

*Euctenogobius latus*, sp. n.

D.  $6\frac{1}{10}$ . A.  $\frac{1}{10}$ . L. lat. 60.

The depth of the body is contained eight times and a half in the total length, being less than half the length of the head, which is very large and broad, its length one fourth of the total, its breadth more than half its length and much greater than its depth. Muzzle prolonged, broad and flattened above, nearly half the length of the head; upper jaw overlapping the lower. Teeth rather stout, in one series only in the upper jaw. Eyes small, on the upper surface of the head; their diameter equal to the interorbital space, and one third of the length of the snout. Head naked. Scales small in front of dorsal, large on the body; thirteen series between dorsal and anal. Ventral not reaching to vent; pectoral longer; first dorsal rather higher than the body and than the second dorsal; caudal rounded, rather more than one sixth of the total length. Reddish or yellowish brown, with dark brown spots and variegations on the sides; fins barred and spotted with dark brown; the second dorsal with regular variegations between the rays; anal grey.

This species presents a considerable resemblance to *Gobius banana* and *G. transandeanus*; but the teeth are distinctly those of *Euctenogobius*. We are not told whether *Gobius dolichocephalus*, Cope, Trans. Amer. Phil. Soc. xiii. p. 403, has the teeth in one or more series in the upper jaw; but a comparison with the descriptions of that species and of *Euctenogobius badius*, Gill, Ann. Lyc. N. H. New York, vii. p. 45, shows that the present species differs considerably from both of them.

One specimen in the collection of the British Museum was collected by Dr. Wucherer at Bahia. Length  $6\frac{1}{4}$  inches.

*Electris perniger* (?), Cope, Tr. Am. Phil. Soc. (n. s.) xiv. 1871, p. 473.

D.  $6\frac{1}{5}$ . A.  $\frac{1}{5}$ . L. lat. 56.

A spine at the angle of the præoperculum. Height of body one sixth of total length; length of head contained rather

more than three times and a half in the same. Head thick, obtuse, lower jaw prominent. Eye one sixth of length of head, and contained once and a half in interorbital space. Upper part of head scaly to between the eyes; operculum scaly, præoperculum naked; sixteen series of scales between second dorsal and anal. First dorsal a little lower than the second. Caudal contained five times and a half in total length. Teeth not enlarged. Colour dusky brown; first dorsal whitish at the top and longitudinally streaked with dark brown; second dorsal with numerous longitudinal series of dark-brown spots; caudal barred like second dorsal; other fins dusky. Young specimen much lighter-coloured.

Two specimens, adult and young, in the British-Museum were sent from Bahia by Dr. Wucherer. They differ in several points from Cope's description, but are probably to be referred to the above species.

*Eleotris brevirostris*, Steindachner, Sitzungsab. Akad. Wien, lvi. 1, 1867, p. 314, = *E. compressus*, Krefft, P. Z. S. 1864, p. 184.

*Eleotris Monteiri*, sp. n.

D.  $6\frac{1}{8-9}$ . A.  $\frac{1}{8-9}$ . L. lat. 69.

Resembles *E. fusca*. Præoperculum with spine; scales smaller than in *E. fusca*, particularly on the fore parts of the body. Outer series of teeth not enlarged as in that species; the free portion of the tail also much less in depth and more rounded. Minute scales on head to between eyes, and on opercular bones. Height of body one seventh of total length, and rather more than half the length of the head. Lower jaw the longest, and prominent. Maxillary reaching to beyond the vertical from centre of eye. Interorbital space flat, once and a half the diameter of the eye, which is less than one sixth of the length of the head. First dorsal lower than second, much lower than in *E. fusca*. Caudal elongate, oblong, one fifth of the total length. Colour dark brown above, lighter beneath; fins variegated or clouded with dark brown.

One specimen in the British-Museum collection from the river San Nicolas, Little Fish Bay, in Angola, presented by Mr. Monteiro. Length 5 inches.

*Amblyopus mexicanus*, sp. n.

D.  $6\frac{1}{15}$ . A.  $\frac{1}{15}$ .

Height of body one thirteenth of the total length. Body covered all over with scale-shaped crypts. Head naked.

Dorsal three fourths of height of body. Eye small, but distinct. Snout obtuse; lower jaw advancing a little beyond upper. Teeth small, closely set, the outer series much smaller and more closely set than in *A. Broussonetii*. Dorsal and anal connected with caudal. Upper parts dark brown, with a series of white spots along the whole length of the side; lower parts of sides and body white.

One specimen in the British Museum, from Mexico, purchased. Length 1 foot 8½ inches.

## BIBLIOGRAPHICAL NOTICES.

### *Two Bone-Caves in Switzerland.*

1. AXON. *The Excavation in the Kesslerloch near Thayingen*: 'Alpenpost,' No. 14, April 4, 1874, pp. 196-199, with 2 woodcuts.
2. Prof. ALBERT HEIM. *On a "Find," of the Reindeer Period, in Switzerland*: Mittheil. antiquarisch. Gesellschaft in Zürich, vol. xviii. Heft 5, 1874, pp. 125-135, with a 4to plate.
3. H. KARSTEN. *Studies of the Primeval History of Man in a Cave of the Schaffhausen Jura*: Mittheil. antiq. Ges. vol. xviii. Heft 6, 1874, pp. 139-162, with 4 4to plates.

I. THE Kesslerloch is a cave piercing a spur of the Jura, about a kilomètre west of the railway-station at Thayingen (or Thäingen), in the Canton of Schaffhausen. It opens to the east on the level of the valley along which the railway passes, and to the south-west at about three mètres higher level. Many similar, but smaller, caves are found in the neighbouring hills of upper white Jurassic limestone. Incited by the discoveries made in the many caves of Germany, Belgium, and France, the two masters of the High School of Thayingen, MM. Wepf and Merk, set to work examining this cave in the Christmas holidays of 1873-74. Having removed 1 to 1½ foot of fragments of limestone, they exposed a black layer, a foot or more thick, full of bones and horns and other remains. Beneath this they came upon a red bed, with black and brown patches in it, over 6 feet thick in one place (down to water), and crowded with small flint knives, cores, and flakes, broken marrow-bones, and other evidences of man's early habitation. One of the most interesting specimens was found in the southern half of the cave, on the top of the red bed, about a mètre below the surface, and consists of a piece of subcylindrical Reindeer-antler bearing an incised life-like outline of a Reindeer grazing. The deposits in the cave were horizontal; but the floor of the cave was found to be much lower near the entrance than further back; and it is thought that the higher part was the habitation, and into the lower part the refuse bones, stones, &c. were flung by the old inhabitants. No definite succession of